MENG ZHANG

Human Factors Engineer

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Berlin, Germany

EXPERIENCE

Senior Data Analyst
01/2025 - 04/2025

GETEC Group — Berlin, Germany

- Built automated reporting pipelines, improving data availability and reducing manual reporting time
- Predicted demand trends

Research Associate
07/2016 - 09/2024

German Aerospace Center, DLR — Berlin, Germany

Institute of Transportation Systems

- Analyzed interactions between road users and developed models to predict intentions and risks using both real-world and simulated driving data
- Assessed drivers' subjective feeling of safety through analysis of physiological signals
- Led empirical studies: conceptualization, experimental design, data collection, and statistical analysis
- Classified driving scenarios and compared behaviors between autonomous and human driving
- Published research and presented findings in academic/industry settings
- Participated in national and international collaborative projects in transportation systems and human factors
- Supervised interns and master's theses
- Pursued a PhD while working full-time

Intern and Research Assistant
10/2014 - 12/2015

German Aerospace Center, DLR — Braunschweig, Germany

Institute of Transportation Systems

- Analyzed driver states including attention and fatigue
- Developed ETL pipelines for multimodal transportation data, integrating trajectories, eye-tracking, ECG, and skin conductance

EDUCATION

Psychology Dr. rer. nat.
04/2019 - 11/2023

Technical University of Braunschweig — Braunschweig, Germany

- Supported appraisal theory of emotion and advocated for multidimensional and multimodal emotion measurement
- Induced and measured drivers' fear under simulated driving conditions
- Application scenario: passive human-machine interaction

Human Factors M.Sc
04/2012 - 04/2016

Technical University of Berlin — Berlin, Germany

- Analyzed emotional states based on facial expressions and physiological signals
- Applied machine learning methods (supervised and unsupervised)
- Cognitive ergonomics, Biopsychology, and Usability Engineering

Psychology B.Sc
09/2006 - 07/2010

East China Normal University — Shanghai, China

- Experimental Psychology, Cognitive Psychology, Statistics, Mathematics

SKILLS

RESEARCH

User Study · Experimental Design · Survey · Statistics · Machine Learning · ECG/EDA · Eye-Tracking · FACS · Trajectory analysis

TOOLS

R · RStudio · Python · VS Code · PowerBI · Confluence · Miro · GitLab

Collaboration

Project Management · Cross-functional Teamwork

LANGUAGES

German	Proficient	●●●●○
English	Proficient	●●●●○
Chinese	Native	●●●●●

PROJECTS

STADT:up
01/2023 - 09/2024 — Germany

Trajectory analysis of road users' cooperation in complex urban scenarios (e.g., in cases of rule violations)

L3Pilot
01/2020 - 10/2022 — Europe

Comparison of driving behavior between human drivers and autonomous vehicles at roundabouts

PEGASUS
07/2016 - 01/2019 — Germany

Investigation of human performance through simulation driving tests to use as a benchmark for automated driving functions